

Riscyforth

A Forth for RISC-V SBCs

<https://github.com/mcmenaminadrian/riscyforth>

Why bother?

Assembly-based Forth, relying on Linux (libc) to provide system services

- Fun – mostly
- Expectation that lots of low-cost RISC-V SBCs were about to arrive (in fact Beagle-V was later cancelled)
- Naïve belief that nobody else would have done this!

Evolution

- “A few weeks” at Christmas 2020 – now lasted a year
- From “just another TIL” to “Forth-like” to “Forth”
- Vast majority of 2012 standard core and most of core-ext now implemented
- Only integer, all in 64 bits (very first versions on emulator were 32 bit but clearly real hardware will be 64 bit)
- Runs on Nezha SBC and QEMU (Fedora)

Limitations

- No FP as discussed
- No Curses-like or graphical output (though Curses stuff easy enough to do)
- No users? (Because no hardware yet?)
- No hardware support
- Editor/interface is poor

And next...

- FP and Curses just a question of finding the time
- Would like to port to OpenBSD
- Would be great to package for Linux distros
- Would be great to get users/contributors